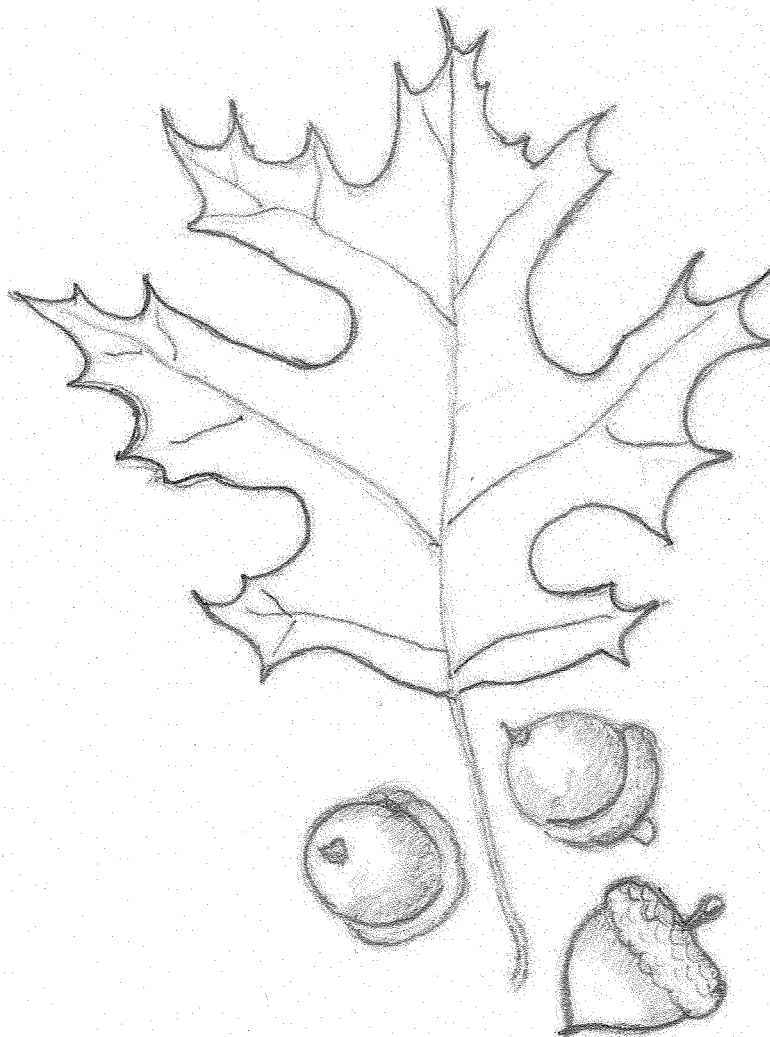


COUCHVILLE LAKE ARBORETUM

at

Long Hunter State Park



Self-Guided Tree Trail

An arboretum, as defined by Webster's Dictionary, is "a place where trees, shrubs and herbaceous plants are cultivated for scientific and educational purposes."

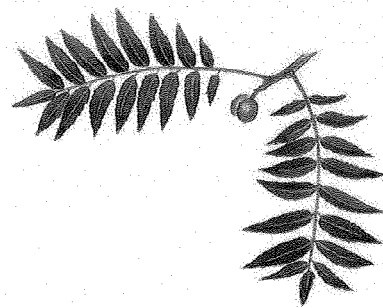
The Couchville Lake Arboretum was created in 2008 by The Friends of Long Hunter State Park. The Arboretum follows the two-mile paved trail around Couchville Lake in Area 2 of the park.

To use this brochure, walk the trail counter-clockwise and look for the green leaf stencils painted on the trail, which will be adjacent to each of the 44 labeled trees. Each label includes the tree's common name and scientific name.

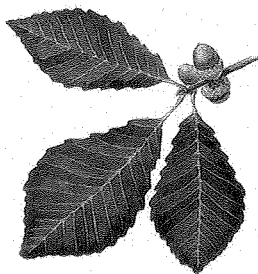
We hope you enjoy your visit to the Couchville Lake Arboretum!

* * * * *

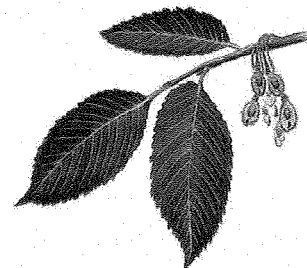
1. **BLACK WALNUT** (*Juglans nigra*) - An often large, rugged tree prized for its beauty and the quality of its wood, which is used for furniture, gunstocks and veneer. The large, hard-shelled nuts are enclosed in a green husk, which becomes darker when ripe. The nuts are widely used in cakes, candies and ice cream, while the husks are used to make walnut furniture stain. An important food for wildlife, particularly squirrels. This species has become scarce in some areas of the U.S. due to overharvesting. Black Walnuts are not uncommon around Couchville Lake: Look for dark, furrowed bark, long leaves consisting of 5-11 pairs of leaflets, and large round husks hanging from branches during autumn. Historically, a tea made from the inner bark was used as a laxative, while the inner bark itself was chewed for toothaches.



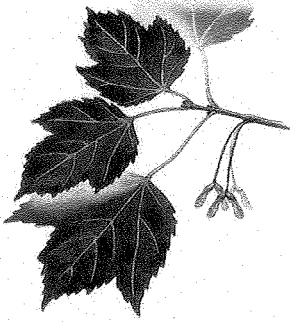
2. **CHINKAPIN OAK** (*Quercus muehlenbergii*) - A member of the white oak family and quite common around Couchville Lake. Its light gray scaly bark and narrow, coarsely toothed leaves separate it from other oaks. Known for its sweet acorns, which provide an excellent source of food for wildlife, especially ruffed grouse, turkey, deer, and squirrels. The acorns mature in a single season and are enclosed for almost half their length in a scaly cup that has hairs on the scales, thus creating a fringe along the margin of the cup. Rarely grows in size or abundance to be commercially important, but its heavy wood makes excellent fuel. Also used for railroad ties. Prefers alkaline soils on limestone outcrops and upland slopes, usually with other hardwoods.



3. **AMERICAN ELM** (*Ulmus americana*) - This large, graceful tree was once widely planted as a shade tree in urban settings because it was stress-tolerant, fast growing, and beautifully shaped. When planted along city streets, the over-arching branches created a cathedral-like effect. Unfortunately, this species was devastated by Dutch Elm disease, a fungus which entered from Europe in the 1930's and is spread by way of elm beetles. Before the disease, some elms lived 200 or more years; now they rarely survive beyond 30 years. Species occurs on moist upland sites and bottomlands. One of the first trees to produce flowers in the spring. The fruits, called samaras, are winged, light green, oval, and wafer-like in appearance; they hang in clusters and are widely scattered by wind and are eaten by finches, ruffed grouse, quail, and rabbits. Woodpeckers commonly use dead trees, creating cavities for their nests.



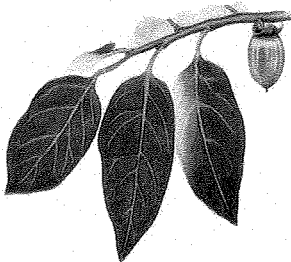
4. **RED MAPLE** (*Acer rubrum*) - Popular ornamental/shade tree known for its brilliant red flowers, fruit, leafstalks, and autumn foliage. Although it is one of the most abundant and widespread trees in the eastern U.S., it is less common around Couchville Lake than other resident maples. Grows on a broad range of sites, from swamps to dry ridgetops. It is a prolific seed producer and the seeds easily germinate. The fruits are small and winged, dispersing efficiently in the wind and also by spring rains and flowing water. A popular browse food for elk and white-tailed deer, while squirrels often eat the buds. Its wood is softer in texture than that of Sugar Maple, and its thin bark makes it a preferred tree for beavers. Pioneers made ink and cinnamon-brown and black dyes from the inner bark.



5. **EASTERN HOPHORNBEAM** (*Ostrya virginiana*) - This small tree is often identified by its bark, which features small, thin, shaggy plates flaking off. Also known as Ironwood because of its extremely hard wood, which is used for tool handles, levers, mallets, and fenceposts. Catkins (a drooping cluster of flowers) appear just before the appearance of new leaves. Fruits are borne in a hanging, hop-like structure. The common name refers to the resemblance of the fruit clusters to hops, an ingredient of beer. The nutlets and buds are eaten by wildlife such as turkey, quail, ruffed grouse, mice, purple finches, rose-breasted grosbeaks, and downy woodpeckers. Rabbits often eat the bark and twigs. A slow-growing tree which is sometimes planted as an ornamental. Look for several small specimens scattered along the Couchville Lake understory.



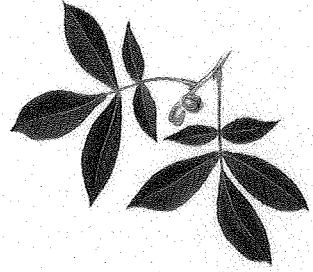
6. **COMMON PERSIMMON** (*Diospyros virginiana*) - A small to medium-sized tree with blackish bark that is broken into small, conspicuous blocks — similar in appearance to an alligator's back. Quite plentiful around Couchville Lake, it is highly adaptable and will thrive almost anywhere. The fruit is extremely astringent when green, but edible and sweet when it turns reddish-orange in the fall. Ripe persimmons can be used to make puddings, cake, bread, and beverages. Also an important food for opossums, raccoons, skunks, deer, foxes, and birds. The close-grained wood is sometimes used for golf club heads, billiard cues and piano keys. The roasted seeds have been used as a substitute for coffee. Its flowers are useful in the production of honey. The inner bark and unripe fruit are sometimes used in treatment of fevers, diarrhea and hemorrhage. The genus name *Diospyros*, from the Greek, means fruit of the god Zeus.



7. **ROUGH-LEAF DOGWOOD** (*Cornus drummondii*) - A clumping shrub or small tree with flat-topped clusters of creamy-yellow flowers and hard, white fruit on reddish brown twigs. The upper surface of the leaves is covered by short, stiff hairs, giving it a rough feel and thus its name. Uncommon in the wild and mostly found around forest borders. A fast grower and relatively short-lived. It sometimes forms a dense thicket that is used as a hedge, border, or as cover for wildlife. At least forty species of birds are known to feast upon the fruits, which ripen in late summer. Also provides excellent browse for rabbits and deer. Has dark red foliage during the fall. Its wood is occasionally used for tool handles. The Couchville Lake Trail features at least one large thicket of Rough-leaf Dogwoods, as well as a few other areas of scattered trees.



8. **SHAGBARK HICKORY** (*Carya ovata*) - A medium or large tree recognized by its bark, which is light gray, fissured and peels off in long, curling strips, giving it a "shaggy" appearance. Grows in a wide range of habitats, from dry woods to low, shaded forests. The thick-shelled nuts are sweet and once were a staple food for American Indians. Also an important food for deer, squirrels and many birds. Bats often roost under the loose bark. Pioneers made a yellow dye from the inner bark. The bright, yellow-green, compound leaves (which generally consists of 5 leaflets) become golden in early fall. Differs from Long Hunter's other resident shagbark, Southern Shagbark Hickory, mainly by its larger leaflets and nuts, and its hairy stems. The tough, resilient properties of the wood make it suitable for products subject to impact and stress, including tool handles, athletic goods and agricultural implements.



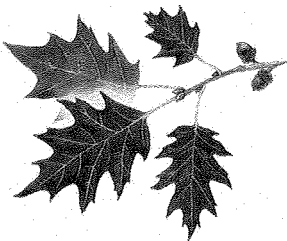
9. **SHUMARD OAK** (*Quercus shumardii*) - One of the largest of the red oak group, frequently attaining heights of 100-125 feet and diameters of 4-5 feet. Often mistaken for Northern Red Oak, Shumard leaves have pointed lobes with many soft, bristle-like tips. The lateral lobes are conspicuously longer and thicker toward the end of the leaves, distinguishing them from other red oaks. Leaves frequently turn scarlet in the fall. Also called Swamp Red Oak, it prefers sunny bottomlands. It grows fast and produces acorns every two to four years that are used by squirrels, deer, turkey, and songbirds. Often marketed for flooring, furniture, interior trim, and cabinetry. Look for several large specimens around Couchville Lake, where they are more plentiful than Northern Red Oak and Black Oak.



10. **HONEY LOCUST** (*Gleditsia triacanthos*) - Uncommon along the Couchville Lake Trail, this fast grower is found on moist bottomlands or limestone soils. Recognized by long, needle-sharp thorns on its trunk. The strongly scented cream-colored flowers appear in late spring, and the fruit -- a long, flat, bean-like pod called a legume -- matures in the fall. The sticky, honey-like pulp inside the fruit, called locust bean gum, is edible and sweet, and is used in candies. Seeds are fed upon and dispersed by grazing cattle and horses. Produces high-quality, durable wood, but its scarcity limits widespread use. Historically, hard thorns of younger trees were used as nails. Honey Locust is a source of honey during the short flowering period in spring. Often found along fencerows, where it is overlooked and allowed to grow. Thornless cultivars have become popular ornamental/shade trees. When looking for this species, keep an eye out for the sharp thorns on the trunk and the long, hanging pods during autumn.



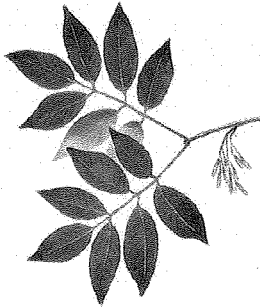
11. **NORTHERN RED OAK** (*Quercus rubra*) - A native to most upland areas of Tennessee, this species is characterized by dark bark which is striped with long, smooth, whitish plates separated by deep furrows -- often giving it a "candy cane" appearance. Prefers deep soil with plentiful moisture. Its acorns provide food for many types of wildlife, including squirrels, deer and wild turkey. Acorns take two years to mature; the cup is flat like a saucer and encloses only the lower one-quarter to one-third of the nut. Leaves turn a rich red or reddish-brown during autumn. Like most oaks, its leaves often stay on the tree into the winter months. The most important lumber species of all the red oaks. Its hard, heavy, shock-resistant wood is used for flooring, furniture, millwork, railroad cross-ties, mine timbers, fenceposts, pilings, and pulpwood. Also a popular shade/street tree due to its good form and dense foliage. Historically, tea of the inner bark was used for dysentery, as a gargle for sore throats, and a skin wash for poison ivy and burns. Inner bark tea was a folk remedy for cancer.



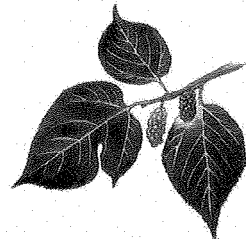
12. **EASTERN RED CEDAR** (*Juniperus virginiana*) - This aromatic conifer is one of the most common species at Long Hunter and the only native evergreen found at the park. Its scale-like foliage can be coarse or fine-cut and is generally light to dark green. Pale blue fruits, which are actually a type of cone, occur on female trees and are an important winter food for many songbirds, which disperse the wingless seeds. Resistant to extremes of drought, heat and cold. Provides food for wildlife, nesting and roosting for birds, and protective vegetation for fragile soils. The fine-grained, soft, brittle, pinkish to brownish-red heartwood is fragrant, very light and durable. Because of its rot resistance, the wood is used for log cabins and fence posts. The aromatic heartwood is avoided by moths and thus is in demand as lining for clothes chests and closets. Cedarwood oil is used for fragrance compounds. One type of butterfly caterpillar, the Juniper Hairstreak, actually feeds on the rough, thick leaves.



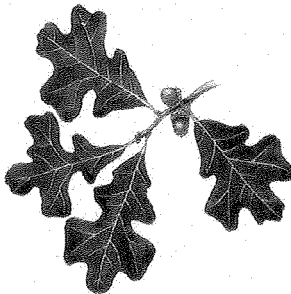
13. **WHITE ASH** (*Fraxinus americana*) - A large tree which typically has a straight trunk and a dense, conical or rounded crown of foliage. Leaves have whitish lower surfaces. Mature bark develops tight, diamond-shaped furrows. Prefers well-drained, fertile soils with high nitrogen content. Leaves turn yellow then purple in autumn. The fruit, a wing-like samara, can be blown a good distance from the parent tree and provides food for wildlife such as wood ducks and bobwhite quail. Its strong, heavy wood is used for making baseball bats, tennis racquets, hockey sticks, oars, and playground equipment, as well as handles for rakes and shovels. One of Long Hunter's most common deciduous trees (i.e., trees that shed their leaves annually) and considered by many to be the best of all firewoods. In earlier times, White Ash leaves in a hunter's pocket or boots were "proven" to be offensive to rattlesnakes and thereby provided protection from them.



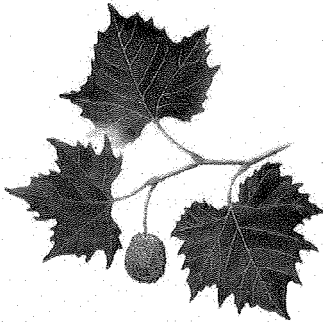
14. **RED MULBERRY** (*Morus rubra*) - A medium-sized tree known for its large, sweet, reddish-purple fruits which are eaten by humans, birds and small mammals. The fruits are often used in jellies, jams, pies, and drinks. Fairly common around Couchville Lake, this species occurs chiefly in moist forests, especially along streams. The only native mulberry of eastern deciduous forests. Also popular as an ornamental/shade tree. Large ovate leaves (with or without lobes) turn bright yellow in fall. Because of its durable heartwood, it's often used for fenceposts. Other uses include farm implements, cooperage, furniture, interior finish, and caskets. Fruits that mature fall to the ground near the seed tree and are eaten and dispersed by many birds and mammals. Young tender twigs may be eaten raw or cooked as a vegetable along with the very young unfolded leaves.



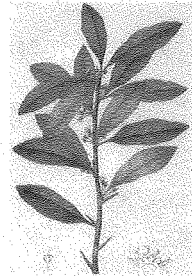
15. **POST OAK** (*Quercus stellata*) - This coarsely branched oak with a dense, oval crown often has a scrubby, rugged growth form because it tends to grow on dry, sandy or gravelly, nutrient-poor sites. When growing in grassy barrens and dry upland forests, it can be a small to medium-sized tree; however, some Post Oaks around Couchville Lake have grown quite large because of better growing conditions. Easily identified by its thick, leathery, cross-shaped leaves, although the leaf shapes vary by region. The common name comes from the fact that the wood is often used for fence posts. *Quercus* is the ancient classical name for the European oaks; *stellata* refers to the dense covering of star-like hairs on the leaves and young twigs. Its cavities are often used as homes for wildlife, and birds use its strong leaves for nesting material. Its small acorns provide food for deer, turkey, raccoons, and many songbirds.



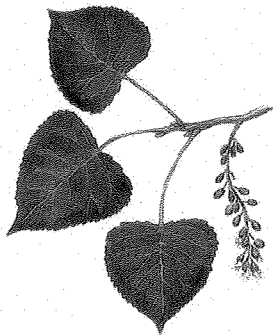
16. **AMERICAN SYCAMORE** (*Platanus occidentalis*) - One of the tallest deciduous trees in the U.S. and commonly found growing along streams, lakes and ponds. Its often massive trunks can reach up to 8 to 12 feet in diameter. Look for them growing along the edges of Couchville Lake. Easily recognized by its brown and white mottled bark, which becomes totally white on the upper trunk and branch surfaces, giving it the name "ghost tree". Globular, ball-like fruits hang on trees through winter, breaking up or falling off the following spring. Close-textured wood is often used for lumber, veneer, furniture, crates, and butcher blocks. American Indians used the trunks to make dug-out canoes. Hollow trees are used as dens for owls, bats, squirrels, and raccoons. Before widespread European settlement, the hollow trunks of old, giant trees were often homes for chimney swifts, and even sheltered early settlers.



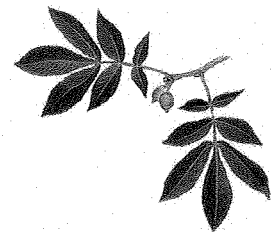
17. **SOUTHERN BUCKTHORN** (*Bumelia lycioides*) - Deciduous shrub or small tree up to 15 to 20 feet, often twisted and irregular in appearance. Simple, smooth, lance-shaped leaves are alternate or clustered on short side twigs. Produces small, clustered, bell-shaped white flowers in late summer. Its juicy, pea-sized, single-sided maroon berries ripen in fall and are eaten by birds, but are bitter and not palatable to humans. Prefers moist, well-drained soil in full sun. Often found growing along the borders of ponds and swamps and in low, wet areas. Sometimes used as a shrub border. Only a few of these trees have been noted around Couchville Lake, but are somewhat plentiful in other areas of the park.



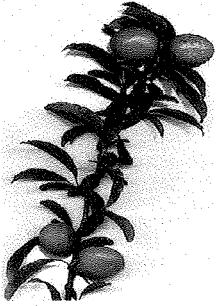
18. **EASTERN COTTONWOOD** (*Populus deltoides*) - Tall, large-canopied tree with upright limbs that often arch at the tips, creating a vase-shape outline. Commonly grows along streams in floodplains and in bottomland woods. Large, papery, triangular leaves turn yellow in fall. Seeds wind-borne on a tuft of cottony hairs; the common name refers to the abundant cottony seeds, which you might find scattered along the Couchville Lake Trail during spring. A short-lived tree and very shade intolerant; however, it is a good pioneer tree (first to colonize an area) because of its rapid growth and size. Gray corky bark becomes deeply furrowed on older trees. The lightweight, rather soft wood is used primarily for core stock in manufacturing furniture and for pulpwood. Beavers often cut sapling and pole-sized trees for food and for dam construction. According to legend, the original design for a teepee was discovered by an Indian who twisted a cottonwood leaf around his fingers, forming a miniature teepee.



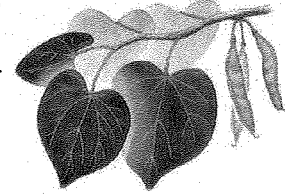
19. **BITTERNUT HICKORY** (*Carya cordiformis*) - A slender but tall hickory which typically develops several primary ascending limbs, forming an arched shape. Has the largest range of the hickories and is the fastest growing of the group. Also known as Swamp Hickory, it produces long, graceful catkins and large, hard-shelled nuts. Its nuts are of little value for human consumption because of extreme bitterness, which also make them unfavorable to most wildlife. The leaves attain a bright yellow color early in the fall and holds its foliage longer than other hickories. Distinguishable from other resident hickories by its yellow bud scales and its nuts, which have a four-winged husk. Its close-grained hardwood is highly shock resistant, which makes it excellent for tool handles. The leaves are high in calcium and greatly improve the soil as they decay. Also a choice fuel for smoking meats. Early settlers used oil extracted from the nuts for oil lamps.



20. CHICKASAW PLUM (*Prunus angustifolia*) - A small, twiggy, thicket-forming tree with fragrant white flowers in flat-topped clusters which are a popular nectar source for butterflies. One of the first trees to bloom in the spring; flowers emerge before the leaves in late winter or early spring on the previous year's wood. Yellow fruit ripens to red during summer and can be eaten fresh or made into jellies or preserves. Scaly, blackish bark has branches which are covered with thorn-like side branches. Possibly brought here from the Mississippi River valley and cultivated by Chickasaw Indians before the arrival of European colonists. The thorny thickets are valuable for songbird nesting and roosting, while various other animals use it for bedding and escape cover. The fruit is consumed by numerous birds and other wildlife. An uncommon species around Couchville Lake.



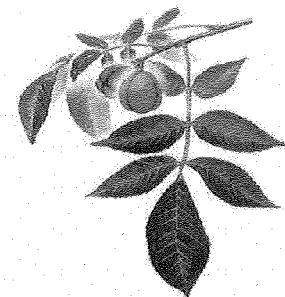
21. EASTERN REDBUD (*Cercis canadensis*) - Often planted as an ornamental, this small, short-lived tree is found throughout Tennessee and all around Couchville Lake. Stands out in early spring because of the striking, bright pink flowers that emerge before the leaves appear. The edible flowers can be eaten raw in a salad, or fried. Its flowers are important in the production of honey by bees. Also recognized by its smooth, heart-shaped leaves. Typically an understory tree preferring moist, well-drained sites. The fruits are flat, reddish-brown pods which contain bean-like seeds. The fruits sometime remain on the tree throughout the winter, making them a valuable wildlife food. Tea made from the bark is a folk remedy for stomach ache, heartburn and other ailments. The seed oil has a peanut-like flavor and is used as a seasoning.



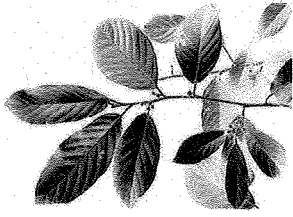
22. SASSAFRAS (*Sassafras albidum*) - This common tree of Long Hunter is known for the aromatic, root beer-like smell of its roots, bark, stems, and leaves. American Indians used the tree for a wide range of medicinal purposes and also made tea from the inner bark and roots, and used the dried leaves as a spice to flavor foods. European settlers quickly adopted Sassafras tea; by the mid-1600's, Sassafras was America's number two export to Europe -- second only to tobacco. A colonial species that is often found growing in groves. Leaves vary in shape; most are shaped like either a mitten, a "ghost," or a football. In autumn the leaves turn brilliant shades of yellow, orange and red. The small greenish-yellow spring flowers are popular with honey bees and other insects. Dark blue fruits appear on female trees in late summer and are devoured by songbirds as fast as they ripen. Sassafras is the host plant of the common Spicebush Swallowtail butterfly and the Spicebush Silkmoth. The dried bark is sometimes ground to sweeten and thicken stews.



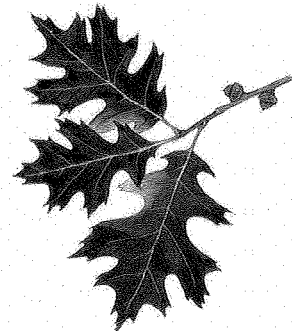
23. MOCKERNUT HICKORY (*Carya tomentosa*) - This medium-to-tall tree is recognized by its dark bark, which is rough and thin with shallow furrows and narrow platy ridges. Its bark does not peel like shagbark hickories. The underside of the leaves, which are densely covered with soft hairs, also separate it from other hickories. Leaves often turn bright golden-yellow during autumn. Tiny flowers are clustered together to form a hanging catkin. The name "mockernut" refers to the difficulty in extracting the small, edible nut from its large, thick shell. At maturity, the sides of the nut split apart so that there are four pieces of thick husk surrounding the seed. The nuts provide food for squirrels, deer, small rodents, raccoons, and turkeys. A black dye can be extracted from the bark by boiling it in vinegar solution. The wood is prized for furniture, flooring, tool handles, baseball bats, skis, and veneer. It has a very high fuel value, both as firewood and as charcoal, and is preferred for smoking hams.



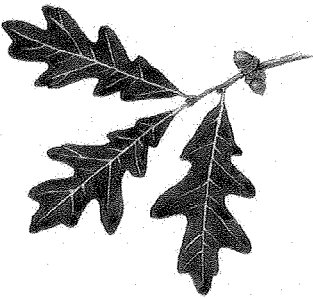
24. CAROLINA BUCKTHORN (*Rhamnus caroliniana*) - A small tree or shrub with elliptical, glossy, dark green leaves that often stay green into late fall. The yellowish flowers are tiny and rather inconspicuous, but the round, berry-like fruits are showy, starting out bright red and then turning black as they ripen in autumn. The ripe fruits are a source of food for many songbirds, including mockingbirds, catbirds and brown thrashers, but are inedible to humans. Its foliage and stems are browsed by rabbits and deer. Brilliant fall foliage is yellow to yellow-orange and often lasts into the winter. Also known as Indian Cherry, it is unusual among the buckthorns in that it does not have thorns. Prefers limestone soils, but will grow almost anywhere and is usually found as an understory tree. Look for a handful of these small trees scattered along the Couchville Lake Trail.



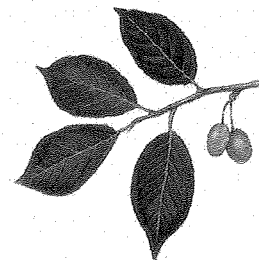
25. BLACK OAK (*Quercus velutina*) - This member of the red oak group is one of the most common trees of eastern deciduous forests. Thick, glossy, dark green, pointed-lobed leaves often turn orange or red in fall. The species name *velutina* is a reference to the underside of the leaves, which are covered with fine hairs. Also distinguishable by the yellow or orange inner bark, formerly a source of tannin, of medicine, and of a yellow dye for cloth. An important tree for both wildlife and timber, it prefers moist, rich, well-drained soils. Its large, spreading branches form an open crown that is often quite irregular. The fruit, an acorn that occurs singly or in clusters of two to five, is about one-third enclosed in a scaly cup and matures in two years. The cavities often serve as a home for wildlife such as owls and squirrels; in fact, one Black Oak cavity along the Couchville Lake Trail has even been used by bees for a hive.



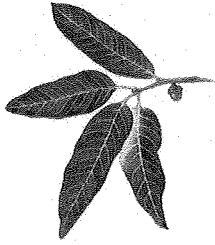
26. WHITE OAK (*Quercus alba*) - A massive, long-lived tree recognized by its wide-spreading crown, large horizontal branches, and round-lobed leaves, which turn burgundy in fall and often remain on the tree well into winter. Its sweet acorns provide an excellent source of food for wildlife, including squirrels, blue jays, nuthatches, woodpeckers, crows, ducks, and deer. Highly prized for its beauty and superior wood, which is used for veneer, basketry, barrels, hardwood flooring, and boat construction. White Oaks over 150 feet tall, 8 feet in diameter and 600 years old have been found in old growth stands. Often planted as an ornamental/shade tree because of its broad round crown, dense foliage and fall coloration. Can produce seeds prolifically, but good acorn crops are irregular and occur only every 4 to 10 years; often several years can pass without a crop. The acorns were made into flour by American Indians for use in bread making.



27. MEXICAN PLUM (*Prunus mexicana*) - A small, single-trunked tree which produces dark red or purple fruit in the fall. Uncommon around Couchville Lake -- only a few specimens have been discovered. It grows singly and does not form thickets as do Long Hunter's other plum species, Chickasaw Plum and American Plum. Produces fragrant, showy white flowers in the spring before the leaves appear. The fruit can be eaten fresh or made into preserves; it's also consumed by many birds and mammals. Typically found on woodland edges or in open fields, it is adaptable to a wide range of soils. Because it does not grow out, or sucker, from the base and is drought tolerant, its root stock is widely used for grafting. Very similar to American Plum; Mexican Plum fruit ripens later and has leaves that are more pubescent.



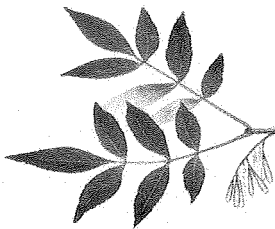
28. SHINGLE OAK (*Quercus imbricaria*) - Stands apart from most red oaks in that its leaves lack deeply cut lobes. Its shiny, leathery leaves are long and broad with an entire margin; they are somewhat lance-shaped and are tipped with a single bristle. Its small, somewhat bitter acorns mature about 18 months after pollination and are an important food for squirrels, ducks and many birds. Yellow-brown to russet-red fall foliage persists through winter. The common name refers to use of the wood for shingles by the pioneers, a practice continued today. Often used as an ornamental/shade tree and is also suitable for hedges, screens and windbreaks. Commonly found growing in uplands with good drainage. An uncommon tree around Couchville Lake. *Quercus* is the ancient classical name for the European oaks; *imbricaria* means "overlapping," as with shingles.



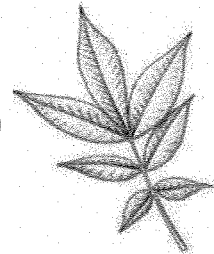
29. BLACK WILLOW (*Salix nigra*) - A medium-sized, fast-growing tree found in wet soil along streams and at the margins of ponds and lakes. Its spreading, shallow roots need a continuous supply of moisture throughout the growing season. Often has several trunks growing out at angles from one root. Its wood is eaten and used by beavers, and the tree provides cover for waterfowl such as herons and geese. Dead trees provide nests for Prothonotary Warblers, Long Hunter's only cavity-nesting warbler. Often drops branches into the water, adding nutrients and logs for fish and aquatic invertebrates. The only commercially important willow of about 90 species native to North America. Large specimens are valuable in binding soil banks, thus preventing soil erosion and flood damage. The light wood works well with tools; it glues, stains and finishes adequately, but it lacks durability. In 1829, a natural glucoside called salicin, the active compound in aspirin, was isolated from Black Willow; today salicylic acid is synthesized in the laboratory. American Indians used the young branches and twigs to make baskets, while other parts were used to treat indigestion. Look for this species along the edges of Couchville Lake.



30. GREEN ASH (*Fraxinus pennsylvanica*) - The most widely distributed of the American ashes and easily confused with White Ash. It has pinnately compound leaves that are somewhat smaller than White Ash, with seven to nine leaflets per leaf. Green Ash leaf scars are half-round whereas White Ash has deeply notched or "smiling" leaf scars. Natural stands are usually confined to bottomlands. It is highly tolerant of water, thus its nicknames Swamp Ash and Water Ash. Wing-like fruits (called samaras) hang in clusters from female trees and are eaten by a variety of birds and mammals, including wild turkey. Exceedingly hardy of climatic extremes and widely planted for ornamental uses, windbreaks and strip mine reclamation. Its wood is considered somewhat inferior to that of White Ash, but its hardness, high shock resistance, and excellent bending qualities still make it useful in specialty items such as tool handles and baseball bats.



31. RED HICKORY (*Carya ovalis*) - This medium-to-large tree was once considered by many botanists to be a hybrid species between Shagbark Hickory and Pignut Hickory, but it is now considered an individual species. Fairly common around Long Hunter. Prefers to grow on dry, upland soils. The nuts are small, thick-shelled, often quite sweet, and serve as an important food for many types of wildlife, including turkey, raccoons, deer, small rodents, and squirrels. The Greek *ovalis* refers to the egg-shaped nuts. Generally has seven leaflets per leaf but sometimes five or nine; its petiole (leaf stalk) bases are often red. The leaves have beautiful yellow fall color. The bark on young trees is smooth, but becomes finely shaggy with age; mature bark often develops close interlacing shaggy-topped ridges.



32. **PIGNUT HICKORY** (*Carya glabra*) - This slow-growing tree features pear-shaped, somewhat bitter nuts which are an important food for many species of wildlife, including raccoons, foxes and black bears. Named in colonial times from the consumption of the small nuts by hogs. Pignuts are distinguished from other hickories by their tight bark, slender twigs, and thin nut husks that resemble a pig's snout. Its leaves are often smaller than other hickories and normally feature five leaflets. The wood is used for a variety of products, including fuel for home heating, tool handles and skis. In earlier times, the wood was used for wagon wheels. Prefers high, dry sites and has good yellow fall color.



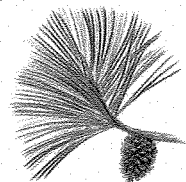
33. **SILVER MAPLE** (*Acer saccharinum*) - A common tree that grows along waterways and in wet soils throughout Long Hunter. Plump red flower buds are visible in winter and are among the first to bloom in spring. As its name suggests, the deeply cut leaves are silvery beneath. Fall color ranges from yellow-brown to yellow tinged with bright red. Its rapid growth makes it a popular ornamental tree; however, its brittle branches are easily broken in windstorms and the abundant winged seeds produce litter. Sugar can be obtained from the sap, but yield is low and not as sweet as Sugar Maple. The large rounded flower buds are a vital food source for squirrels during late winter and early spring when their stored food supplies have become exhausted.



34. **WINGED ELM** (*Ulmus alata*) - A hardy small-to-medium-sized tree quite common around Couchville Lake. Recognized by the very broad, thin pair of corky wings that form along the branchlets after a couple of years. Its fruit, a reddish or brown wing-like samara, appears in the spring. Seeds are eaten by birds. The twigs and leaves are an important browse for deer. Historically, the fibrous inner bark was made into rope for fastening covers of cotton bales. Also known as Wahoo Elm, a name given to it by the Creek Indians. Moderately strong wood often used for crates, boxes and tool handles. It grows well on fertile soils and is a useful component of several forest types. An important pioneer tree because it often takes over open fields.



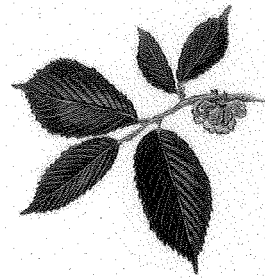
35. **LOBLOLLY PINE** (*Pinus taeda*) - A rapidly growing tree which loses its lower branches with age, forming an open, rounded crown. Has long, pale green needles, borne in clusters of three. Loblolly does not occur naturally in Middle Tennessee; this specimen probably sprouted from a wayward seed. The principal commercial southern pine, its wood is used for lumber, pulpwood and utility poles. Also excellent for erosion control plantings because of its fast growth and the large amount of needle litter. The Old English word loblolly means "low wet place," although they aren't limited to that habitat. Its soft wood is excavated by woodpeckers for nest holes. Large trees provide nesting sites for ospreys and bald eagles. Also known as Old-field Pine, derived from its ability to rapidly invade abandoned fields. Produces yellowish cones which turn brown with age. Pine forests attract such wildlife as deer, squirrel, quail, turkey, mourning doves, and rabbits.



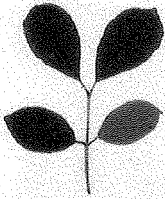
36. **HACKBERRY** (*Celtis occidentalis*) - One of the most abundant trees in the Couchville Lake area, this member of the elm family is often recognized by its corky, wart-like projections that cover the bark on older specimens. Tolerant of a wide range of habitats, it has a rounded crown of spreading or slightly drooping branches, often deformed by bushy growths called witches'-brooms, which are produced by mites and fungi. The leaves often bear rounded galls caused by tiny jumping plant lice. Produces edible purplish berries which are consumed by cedar waxwings, mockingbirds, robins, and many other birds. The common name was derived from hagberry, meaning marsh berry, a name used in Scotland to describe a cherry. Its soft but heavy wood is used for cheap furniture, boxes, crates, fencing, and plywood.



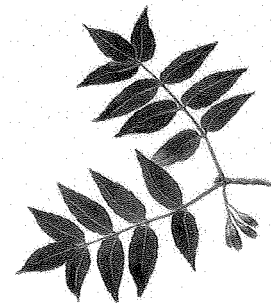
37. SLIPPERY ELM (*Ulmus rubra*) - A medium-sized tree with a somewhat vase-shaped outline, it grows best on moist, rich soils and flood plains. The rough, dark green leaves have fuzzy, sandpaper-like undersides. The thick, glue-like, edible inner bark is dried and afterwards moistened for use as a sore throat remedy or as a poultice. This slippery inner bark (found by chewing through the outer bark of a twig) is helpful in identification. The inner bark is also popular as a survival food; it is ground into a powder and mixed with water to make an oatmeal-like soup which can be eaten when other foods can't be digested. Distinguished from American Elm by the hairiness of the buds and twigs (both smooth on the American Elm), and its slightly larger, rougher leaves. The inner bark is strong and durable, and can be spun into thread, twine or rope. The seeds are eaten by birds and small mammals, and deer and rabbits browse the twigs. The fresh green fruits were one of the favored spring foods of the extinct passenger pigeon. The Latin name *rubra* refers to the large brown buds covered with rust-colored hairs.



38. RUSTY BLACKHAW (*Viburnum rufidulum*) - A small, unique tree with glossy, dark green, finely toothed leaves. Its leaf stems are clothed with a dense, rusty-red pubescence. The foliage turns rich reddish purple in the fall. Bark typically separates into dark, rectangular plates. Produces clusters of showy, creamy-white flowers during spring. Small, blue-black fruits with a waxy coat appear in autumn; the sweet, edible fruits hang from the tree in clusters and are relished by birds and small mammals. Often used in wildlife gardens, this tree can form thickets under favorable conditions. The Latin name *rufidulum*, meaning reddish, also refers to the hairs on the stems. Prefers rich, moist bottomlands. Considered uncommon around Couchville Lake; look for a few single specimens scattered along the trail.



39. BLUE ASH (*Fraxinus quadrangulata*) - This common tree of Long Hunter is also known as Square-stemmed Ash because its twigs and stems are often square, distinguishing it from other ashes in the park; thus its Latin name *quadrangulata*, which means "four-angled". The leaves are similar to other ashes, turning yellow in fall; the bark is different from other ashes, however, having a scaly appearance. The name "blue ash" is a reference to the blue dye produced when the inner bark is placed in water; and/or the sap, which turns bluish when exposed to air. Prefers upland woods, wooded slopes, and limestone cliffs. Quite common in edges and in the pocket forests of Long Hunter's cedar glades. Like other ashes, the fruit is a wing-like samara. The wood resembles White Ash but is heavier and more brittle; it is used as flooring, baseball bats, furniture, tool handles, crates, and barrels.



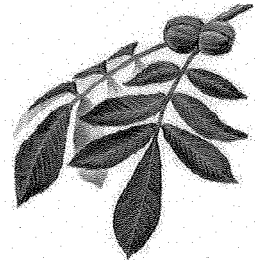
40. FLOWERING DOGWOOD (*Cornus florida*) - Popular ornamental tree recognized by its showy white or pinkish floral bracts that are a sign of spring. Bracts are often mistaken for petals, but are actually petal-like structures that occur beneath the true flowers, which are crowded together in yellowish-green clusters above the four bracts. Typically an understory forest species, it is also found in old fields and fencerows. The shiny, bright red, berry-like fruits are eaten by chipmunks and many birds, including bluebirds, cardinals and vireos, but they are poisonous to humans. The leaves often turn brilliant red or maroon during the fall. The species has an extremely high calcium and fat content; thus, the seed, fruit, flowers, twigs, bark, and leaves are all used as food by various animals. Bark typically resembles alligator hide.



41. **BOXELDER** (*Acer negundo*) - This small-to-medium-sized tree has the broadest range of all the North American maples. Differs from other maples in its irregular growth, sprouting base, and compound leaves (i.e., a leaf with two or more leaflets). Grows best along streams and in floodplains. Hardy and fast-growing, it is planted for shade and shelterbelts but is short-lived and easily broken in storms. Often found in the understory of cottonwood-willow stands. The common name indicates the resemblance of the foliage to that of elders (*Sambucus*) and the whitish wood to that of Boxwood (*Buxus sempervirens*). Seeds and other portions of Boxelder are used as food by songbirds and rodents. Because of its delayed seeding habit, some seeds are available during winter. The sap is used to a limited extent for syrup.



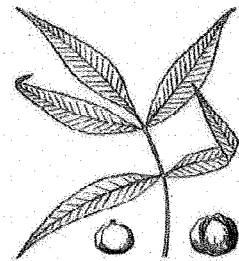
42. **SHELLBARK HICKORY** (*Carya laciniosa*) - Uncommon around Long Hunter, this tall, slow-growing, long-lived tree is similar in appearance to Shagbark Hickory; however, its leaves are typically longer and have seven leaflets, while Shagbark usually has five. Shellbark is further distinguished from the other hickories by its orange-brown dotted twigs. Also called Kingnut because it produces the largest nuts of all the hickories. The thick-shelled nuts are sweet and are popular with squirrels. The wood is hard, heavy, strong, and flexible, making it a favored wood for tool handles. The Latin name *laciniosa*, meaning with flaps or folds, refers to the shaggy bark.



43. **SUGAR MAPLE** (*Acer saccharum*) - One of the most common species along the Couchville Lake Trail, this large tree is known for its fiery orange fall foliage. The boiled sap of the tree is the commercial source of maple sugar and syrup, a use colonists learned from the American Indians. Trees are tapped early in the spring for the first flow of sap, when they have the highest sugar content. Bark is smooth in young trees, becoming rough and often blackened with age. Produces seeds in fall, unlike Silver Maple, which seeds during spring. Among the leading furniture woods; it's also used for basketball courts, bowling alleys and pins, flooring, boxes, and veneer. Often has dead branches and cavities for wildlife. Look for Yellow-bellied Sapsucker drill marks in a machine-gunned circle around some specimens. This woodpecker's work causes sap to flow, attracting insects which are eaten along with the sap. It does not seriously harm the tree.



44. **SOUTHERN SHAGBARK HICKORY** (*Carya carolinensis-septentrionalis*) - Also known as Carolina Hickory, this is one of the most common hickories around Couchville Lake. Mature trees are recognized by the thin, blackish twigs, small buds, and shaggy bark, which separates into strips that often curl away from the trunk on both ends. As compared to Long Hunter's other shagbark, *Carya ovata* (also known as Northern Shagbark Hickory), Southern Shagbark has smaller, lance-shaped leaflets, smaller nuts, and smooth, slender twigs. Where present, Southern Shagbark is often the dominant hickory; it usually does not grow with other shaggy-barked hickories. The wood is hard, strong, and very tough; it is often used for tool handles and also makes a very good fuel. Leaves often release a pungent odor when bruised or crushed. The edible fruits have a husk that splits into four sections.



Brochure created by Jason Allen. Cover art by Fred Dickson. Text by Jason Allen and Tyler Blystone. Trail leaf stencils by Tina Ahyoka Turbeville. Special thanks to Liana Dranes, Darel Hess, James & Adraine Meador, John Froeschauer, and Thurman Mullins.

Long Hunter State Park * 2910 Hobson Pike * Hermitage, TN 37076 * 615-885-2422